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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/621,871	07/17/2003	Masayuki Matsuda	1217-031347	1745

28289 7590 03/09/2005

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EXAMINER
KOPEC, MARK T

ART UNIT	PAPER NUMBER
1751	

DATE MAILED: 03/09/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/621,871	MATSUDA ET AL.	
	Examiner	Art Unit	
	Mark Kopec	1751	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☐ Responsive to communication(s) filed on _____.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-13* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☒ Claim(s) *2,8,9 and 11* is/are allowed.

6)☒ Claim(s) *1,3-7,10,12 and 13* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

The lengthy specification has not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.

The listing of references in the specification is not a proper information disclosure statement. 37 CFR 1.98(b) requires a list of all patents, publications, or other information submitted for consideration by the Office, and MPEP § 609 A(1) states, "the list may not be incorporated into the specification but must be submitted in a separate paper." Therefore, unless the references have been cited by the examiner on form PTO-892, they have not been considered.

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless -
>
> (a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United

States and was published under Article 21(2) of such treaty in the English language.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

The factual inquiries set forth in *Graham* **v.** *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that

was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 1, 3-7, 10, 12 and 13 are rejected under 35 U.S.C. 102(b)/(e) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over either Takamiya et al (6,524,499), Christian et al (5,866,287) or JP 11-25759.

Note that Takamiya et al (6,524,499) is available under 102(e)/103 only.

Also, a full English language translation of JP 11-25759 has been ordered and will be provided to applicant as soon as possible.

Takamiya et al (6,524,499) discloses a transparent conductive film of the present invention is formed to have a conductive layer containing at least ruthenium fine particles, gold fine particles and silver fine particles, the weight ratio of ruthenium fine particles and gold fine particles in the conductive layer being within the range of 40:60 to 99:1 (Abstract). The particle size of the ruthenium fine particles, gold fine particles and silver fine particles used in the conductive layer forming coating is preferably within the range of 1-50 nm, and more preferably within the range of 2-30 nm (Col

4 lines 14-20). In addition to the metal fine particles mentioned above, the conductive layer in the transparent conductive film of the present invention may also contain silica fine particles having a mean particle size of 100 nm or less within the range of 1-80 wt % relative to the above metal fine particles. A conductive layer in which a film has been formed by applying the above conductive layer forming coating containing silica fine particles has remarkably improved film strength and improved scratch strength. In addition, as a result of containing silica fine particles in the conductive layer, in the case of providing one or more transparent layers in its upper layer and/or lower layer that has a refractive index that differs from the refractive index of the conductive layer, there is the advantage of improved adhesion between both layers due to the satisfactory wettability with the silica binder component of the transparent layer, while also further improving scratch strength. Silica fine particles are even more preferably contained within the range of 20-80 wt %, relative to the metal fine particles from the viewpoint of achieving both improved film strength and electrical conductivity (Col 5, lines 19-38). The reference specifically or inherently meets each of the claimed limitations.

Christian et al (5,866,287) discloses a multilayer imaging element which includes a support, at least one image-forming layer, and a transparent electrically-conductive layer. The transparent electrically-conductive layer includes electronically-conductive metal antimonate colloidal particles having a particle size of from 0.005 to 0.05 μm and non-conductive metal-containing colloidal particles having a particle size of from 0.002 to 0.05 μm dispersed in a film-forming binder (Abstract). Particularly suitable non-conductive filler particles include colloidal size (e.g., .about.0.002-0.050 .mu.m) particles of non-conductive tin oxide, zinc oxide, antimony pentoxide, zinc antimonate, **silica**, surface-modified silicas, various natural clays, synthetic clays, and the like. Non-conductive filler particles can be substituted for up to about 75% of the metal antimonate particles in a conductive layer without any appreciable decrease (i.e., .ltoreq.1 log ohm/square) in the surface electrical conductivity and with improved transparency and less haze than conductive layers with similar conductivity containing unsubstituted-metal antimonite (Col 6, lines 12-28). Examples 3-7 utilize a liquid containing zinc antimonite particles (0.015-.030 μm) and colloidal silica (0.007-0.012 μm) in a ratio of 70:15:15 (binder) (Col 15-16).

The reference specifically or inherently meets each of the claimed limitations.

JP '759 discloses Transparent electrically conductive film for cathode ray tube and plasma display - is formed by a coating material which contains specific amount of platinum group metal fine particles of predetermined mean particle diameter. The film is formed by a coating material which contains 10 wt.% or more platinum group metal fine particles of mean particle diameter 50 nm or less. The platinum group metal contains ruthenium, palladium, platinum, rhodium, iridium or osmium. In addition to platinum group metals, 1-60 wt.% of silica fine particles of 100 nm or less mean particle diameter are also contained. One or more layers of transparent thin films having refractive index different from that of transparent conductive layer are attached on top and/or bottom of conductive layer. A transparent thin film having roughness is formed in the outermost layer. A colorant is also contained in one of the layers (Abstract). The reference specifically or inherently meets each of the claimed limitations.

In the event that any minor modifications are necessary to meet the claimed limitations, such as selection of a particular alkali metal content, such modifications are well within the purview of the skilled artisan.

In view of the foregoing, the above claims have failed to patentably distinguish over the applied art.

Applicant is reminded that any evidence to be presented in accordance with 37 C.F.R. 1.131 or 1.132 should be submitted before final rejection in order to be considered timely.

The remaining references listed on forms 892 and 1449 have been reviewed by the examiner and are considered to be cumulative to or less material than the prior art references relied upon in the rejection above.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mark Kopec whose telephone number is (571) 272-1319. The examiner can normally be reached on Monday - Friday from 9:30 AM to 6:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dr. Yogendra Gupta can be reached on (571) 272-1316. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Mark Kopec
Primary Examiner
Art Unit 1751

MK
March 3, 2005